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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,033	10/15/2001	Fumio Tamura	040894-5732	1603

55694   7590   12/05/2006

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EXAMINER
NG, EUNICE

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/976,033	TAMURA, FUMIO
	Examiner	Art Unit	
	Eunice Ng	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Amendment filed 8/16/06; RCE 9/22/06.*

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth

in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR

1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn

pursuant to 37 CFR 1.114. Applicant's submission filed on 08/16/06 has been entered.

Response to Amendment

2.   In response to the Office Action mailed 05/16/06, Applicants have submitted an

Amendment, filed 08/16/06 amending claims 1, 2, 4, 7 and 8, adding new claims 9-14,

without adding new matter, and arguing to traverse claim rejections.

Claim Objections

3.   Claim 4 has been amended to address minor informalities and is acceptable. Thus the

objection is withdrawn.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-8 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brotman

et al. (hereinafter "Brotman"), US Patent No. 6,236,967 in view of Ohmori *et al.* (hereinafter

"Ohmori"), US Patent No. 6,885,990.

Regarding claims 1, 7 and 9, Brotman teaches a method and apparatus for speech

recognition comprising:

speech input means for inputting speech (speech data, col. 6, ll. 53-57; abstract, ll. 5-6

teaches "receiving a spoken zip code from a user");

spot information memory means for storing information relative to spots (street

names, street numbers and zip codes, Fig. 1, element 109 and col. 4, l. 31 – col. 5, l. 19);

storage means for storing object words indicative of spots within said spot information

memory means (recognized address, Fig. 1, element 110 and col. 6, ll. 3-9);

computing means for acquiring similarities between the speech inputting from said

speech input means and the object words stored in said storage means (matching, col. 5, ll.

64-67; abstract, ll. 5-6, teaches "[a]fter receiving a spoken zip code from a user, the

corresponding list of address identifiers is retrieved"; ll. 9-11, "[t]hese plurality of choices

contain words that rhyme with or sound like other address identifiers located in the retrieval

group of address identifiers", ll. 13-15, "the system queries the database for a match between

the spoken address identifier and the stored address identifier"); and

recognition means for recognizing the speech corresponding to one of the object

words from the similarities acquired by said computing means (Fig. 1, element 108 and col. 4,

ll. 13-41),

wherein when a plurality of object words are recognized (rhyme or sound alike) by

said recognition means, a limiting word (range of street numbers) for distinguishing between

said plurality of object words is sampled from said spot information memory means and

stored as an object word corresponding to said limiting word in said storage means (col. 5, ll.

20-29 and col. 6, ll. 6-7), and

wherein the object word corresponding to said limiting word is recognized as speech

(col. 7, ll. 10-38).

Brotman teaches street names and street number ranges are indexed up by a zip code,

for example in Table 2, under Zip code 21405 are stored street names "Blaine Street", "Main

Street", etc., the information being organized in a level structure (col.5, ll.1-29).

Brotman does not explicitly teach wherein when a plurality of object words that are

the same or similar to each other are recognized by said recognition means, a limiting word

for distinguishing between said plurality of object words is automatically sampled from said

spot information memory means at the highest level of said level structure that is capable of

uniquely determining an object word from said plurality of object words and stored as an

object word corresponding to said limiting word in said storage means. However, this feature

is old and well known in the art as evidenced by Ohmori in col.26, ll.46-57, col.3, ll.12-18,

and Figs. 4-6, 27-31, 33 and 35, and corresponding paragraphs.

It would have been obvious for one of ordinary skill in the art at the time the invention

was made to modify the teaching elements of Brotman with Ohmori because Ohmori teaches

that from the viewpoint of the user, to be sequentially inquired from the name of the

prefecture is circuitous (col.26, line 58 – col.27, line 6) and so following the method of

Ohmori would reduce stress on the user while the processing time required for the retrieval

key determination is shortened, the target information ascertained efficiently (col.2, ll.57-64

and col.6, ll.1-11).

Regarding claims 2 and 10, Brotman teaches an apparatus for speech recognition

comprising:

speech input means for inputting speech (speech data, col. 6, ll. 53-57; abstract, ll. 5-6

teaches "receiving a spoken zip code from a user");

storage means for storing object words indicative of spots within said spot information

memory means (street names, street numbers and zip codes, Fig. 1, element 109 and col. 4, l.

31 – col. 5, l. 19);

spot information memory means for storing information relative to spots (recognized

address, Fig. 1, element 110 and col. 6, ll. 3-9);

output means for producing a request message (prompt) urging a user to input said

object words (Fig. 4, step 401);

computing means for acquiring similarities between speech inputted from said speech

input means and the object words stored in said storage means (matching, col. 5, ll. 64-67;

abstract, ll. 5-6, teaches "[a]fter receiving a spoken zip code from a user, the corresponding

list of address identifiers is retrieved"; ll. 9-11, "[t]hese plurality of choices contain words that

rhyme with or sound like other address identifiers located in the retrieval group of address

identifiers", ll. 13-15, "the system queries the database for a match between the spoken

address identifier and the stored address identifier"); and

recognition means for recognizing the speech corresponding to one of the object

words from the similarities acquired by said computing means (Fig. 1, element 108 and col. 4,

ll. 13-41),

wherein when a plurality of object words are recognized (rhyme or sound alike) by

said recognition means, a limiting word (address identifier) for distinguishing between said

plurality of object words is sampled from said spot information memory means and stored as

an object word (recognized address) corresponding to said limiting word in said storage

means (col. 5, ll. 20-29 and col. 6, ll. 5-9),

wherein the limiting word is produced as the request message (prompt) by said output

means (col. 7, ll. 10-33), and

wherein the object word corresponding to said limiting word is recognized as speech

(col. 7, ll. 10-38).

Brotman teaches street names and street number ranges are indexed up by a zip code,

for example in Table 2, under Zip code 21405 are stored street names "Blaine Street", "Main

Street", etc., the information being organized in a level structure (col.5, ll.1-29).

Brotman does not explicitly teach wherein when a plurality of object words that are the same

or similar to each other are recognized by said recognition means, a limiting word for

distinguishing between said plurality of object words is automatically sampled from said spot

information memory means at the highest level of said level structure that is capable of

uniquely determining an object word from said plurality of object words and stored as an

object word corresponding to said limiting word in said storage means. However, this feature

is old and well known in the art as evidenced by Ohmori in col.26, ll.46-57, col.3, ll.12-18,

and Figs. 4-6, 27-31, 33 and 35, and corresponding paragraphs.

It would have been obvious for one of ordinary skill in the art at the time the invention

was made to modify the teaching elements of Brotman with Ohmori because Ohmori teaches

that from the viewpoint of the user, to be sequentially inquired from the name of the

prefecture is circuitous (col.26, line 58 – col.27, line 6) and so following the method of

Ohmori would reduce stress on the user while the processing time required for the retrieval

key determination is shortened, the target information ascertained efficiently (col.2, ll.57-64

and col.6, ll.1-11).

Regarding claims 3 and 11, Brotman teaches wherein said spot information memory

means stores, as information relative to spots, a plurality of facility names and detailed

classifying information and rough classifying information to which each facility name belongs

which are correlated with each other (street names, street numbers and zip codes, Fig. 1,

element 109 and col. 4, l. 31 – col. 5, l. 19).

Regarding claims 4 and 12, Brotman teaches wherein when the plurality of object

words are recognized (rhyme or sound alike) by said recognition means, a limiting word

(street name) for distinguishing said plurality of object words is sampled from said spot

information memory means and stored as the object word in said storage means (col. 5, ll. 20-

29 and col. 6, ll. 6-7), and

wherein when said plurality of object words are distinguished from one another in terms of rough classifying information (within same zip code), only one at a higher level of the object words corresponding to the limiting word (street name) is produced as a request voice by said output means and the object word corresponding to said limiting word is recognized as speech (col. 5, ll. 20-29 and col. 6, ll. 6-7).

Regarding claims 5, 6, 13 and 14, Brotman teaches wherein said recognition means recognizes an object word with similarity within a prescribed range, acquired by said computing means, as the recognized object word (col. 5, ll. 20-29).

Regarding claim 8, Brotman teaches: producing a request message urging a user to input said object words (Fig. 4, step 401); and producing the limiting word as the request message (voice prompt) (col. 7, ll. 10-33).

The rest of the limitations of claim 8 are the same as or similar to those of claims 1, 7 and 9, rejected above, and thus are rejected for the same reasons.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fuji (US 6,763,332) teaches a system and method for selecting a program in a broadcast including a hierarchy of item data.

Yano et al. (EP 0 875 842) teaches an information retrieval apparatus for retrieving a target information corresponding to an input data, from an information group including a
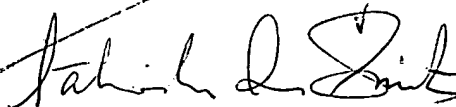
plurality of information, the plurality of information being divided into a plurality of levels of

a hierarchical structure in the information group.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Eunice Ng whose telephone number is 571-272-2854. The

examiner can normally be reached on Monday through Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information

for unpublished applications is available through Private PAIR only. For more information

about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access

to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll-free). If you would like assistance from a USPTO Customer Service Representative or

access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or

571-272-1000.

Eunice Ng
11/30/06

TALIVALDIS IVARS SMITS
PRIMARY EXAMINER